

Title (en)

FAST CLOSED LOOP SYSTEM USING MICROCONTROLLER

Title (de)

SCHNELLER GESCHLOSSENER REGELKREIS MIT MIKROCONTROLLER

Title (fr)

SYSTÈME À BOUCLE FERMÉE RAPIDE FAISANT APPEL À UN MICROCONTRÔLEUR

Publication

EP 3407682 A1 20181128 (EN)

Application

EP 18172053 A 20180514

Priority

GB 201708227 A 20170522

Abstract (en)

Emergency converter (1) for lighting applications for operation from an energy storage device (2) in case of mains failure. In particular, it is proposed a fast closed loop system in a converter using a microcontroller (9) and a corresponding method for controlling the converter. The converter device (1) comprises a battery charger (7) circuit configured to charge the energy storage device (2), a driver circuit (12) including a switch and a microcontroller circuit (9) configured to control the battery charger circuit (7). The microcontroller circuit (9) controls the switch in a mode in which the driver circuit (12) is operated from the energy storage device. The driver circuit (12) is implemented in a coupled inductor boost circuit topology.

IPC 8 full level

H05B 44/00 (2022.01); **H02J 9/00** (2006.01)

CPC (source: EP GB US)

H02J 9/06 (2013.01 - GB); **H05B 45/30** (2020.01 - EP GB US); **H05B 45/38** (2020.01 - EP GB US); **H05B 45/385** (2020.01 - EP GB US); **H05B 45/36** (2020.01 - EP GB US); **Y02B 20/30** (2013.01 - EP)

Citation (search report)

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- [A] YAO JIA ET AL: "Analysis and Design of Charge Pump-Assisted High Step-Up Tapped Inductor SEPIC Converter With an Inductorless Regenerative", IEEE TRANSACTIONS ON POWER ELECTRONICS, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, USA, vol. 30, no. 10, 31 October 2015 (2015-10-31), pages 5565 - 5580, XP011582428, ISSN: 0885-8993, [retrieved on 20150522], DOI: 10.1109/TPEL.2014.2374992

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3407682 A1 20181128; EP 3407682 B1 20231108; GB 201708227 D0 20170705; GB 2562739 A 20181128; GB 2562739 B 20220126

DOCDB simple family (application)

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